

MOBILE TERMINAL IMPLEMENTING A RANGING SIGNAL RECEIVER AND METHOD

Abstract of Disclosure

Mobile terminal implementing a ranging signal receiver and method. Means are provided to incorporate ranging signal reception capability into a mobile terminal (such as a UMTS terminal) notwithstanding the fact that the ranging signal has a bandwidth that is wider than the bandpass of filtering for native signals within the terminal. A ranging signal receiving subsystem receives broadband signals that comprise synchronization bursts, which are equally spaced in time, such as from digital television stations. A common filter will have a bandpass that is smaller than the bandwidth of the ranging signals. However, the correlation subsystem of the mobile terminal enables recovery of synchronization bursts by correlating the ranging signal with a known sequence that has been predistorted to account for the bandpass of the common filter.